MSD
Metropolitan Sewer District

*Louisville and Jefferson County Metropolitan Sewer District*
*700 West Liberty Street*
*Louisville Kentucky 40203-1911*
*502-540-6000*
*www.msdlouky.org*

June 17, 2013

Ms. Donna Seadler
Remedial Project Manager
Kentucky/Tennessee Section U.S.
U.S. Environmental Protection Agency Region IV
61 Forsyth Street
Atlanta, GA 30303

**Re: Result of Air Quality Monitoring - FY 13, Fourth Quarter (FY13-4Q), Lees Lane Superfund Site, Jefferson County, Kentucky, Administrative Order on Consent, USEPA Docket No-91-32-C**

Dear Ms. Seadler:

In accordance with paragraph 11, under Reporting Requirements, of the subject Consent Order and Attachment 1, Operation and Maintenance Plan For Post-Removal Site Control at the Lee's Lane Landfill Site. Section 4.2, Air Quality Monitoring, attached for your information and files is one photocopy each of the following items, prepared by URS Corporation, 1600 Perimeter Park Drive, Suite 100, Morrisville, North Carolina 27560 and received by MSD on June 14, 2013.

1. URS Corporation letters dated June 7, 2013, 2 pages.

2. Figure 1, Lees' Lane Landfill, Sampling Locations, 1page.

3. Table 1, TO-15 Data Summary for Ambient Air Samples at the Lees' Lane Landfill, Sampling date: April 25, 2013, 1 page.

4. Table 2, On-Site Meteorological Data, Sampling date, April 25, 2013, 1 page.

5. Table 3, TO-15 Data Summary for Gas Monitoring Well Samples at the Lees' Lane Landfill, Sampling date: April 25, 2013, 1 page.

Please advise if you have any questions concerning the attached information.

Sincerely,

Richard H. Watkins, Sr.
Sewer Maintenance Supervisor

RHW/rw
Lees-13-4Qtr

Enc.

cc: Kentucky National Resource Environment Protection Cabinet
Mr. Daniel Phelps, Division of Waste Management
Lee Lane File

URS

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June 7, 2013

Mr. Rick Watkins
Louisville Metropolitan Sewer District
3050 Commerce Center Place
Louisville, KY 40211

Dear Rick:

Enclosed is the summary analytical report for the ambient air and gas monitoring well samples collected at the Lee's Lane Landfill site on April 25, 2013 (Sampling Event 53). Seven ambient samples, along with (G1, G2, G3, G4, G5R, G5L, GMW-1, GMW-2, GMW-3) well samples and a Field Blank were taken.

A map of the site, labeled with the sample collection locations for your reference, is shown in Figure 1. Table 1 is a tabular summary of the ambient samples with the primary analytes required for submission to EPA. Benzene, methylene chloride, toluene, and xylenes were detected in small quantities in select ambient samples. Methane concentrations were consistent with historical data.

The sampling locations were chosen based on a combination of prevailing on-site meteorology and accessible sites in the adjacent residential neighborhood per the standard sampling protocol. The meteorological conditions were moderate throughout the sampling day; warm (60 $^{O}$F), with moderate, variable winds. The information displayed in Table 2 was obtained from the Louisville International Airport (Standiford Field) National Weather Service Station. The ambient air samples were collected in Summa canisters positioned 3-5 feet above ground level, integrated over an approximate 7-hour collection period.

The methane analysis was performed by GC/FID using a separate analytical system from the TO-15 analysis employed at STL in Austin. The TO-15 analytical methodology using Gas Chromatography/Mass Spectrometry (GC/MS) was employed. Samples were handled with standard laboratory chain-of-custody procedures. Sample canisters and flow controllers were cleaned and blanked using method TO-12 for total non-methane hydrocarbons prior to field deployment. All of the samples were successfully collected and analyzed for methane and the TO-15 target analytes. Quality control parameters of precision (repeatability) and spiking of surrogate compounds meet internal URS and project-required specifications for all other analyses.

The reliability of this data set can be characterized as good, based on the repeatability (analytical precision), surrogate spike recoveries, blank levels and the relatively few number of unresolved interfering peaks in the sample chromatograms. The April, 2013 field blank canister reported no positive hits other than the surrogate recoveries, with the exception of methane and toluene. The reported results have not been blank corrected in attached tables per our standard project procedure.

URS Corporation
1600 Perimeter Park Drive
Morrisville, North Carolina 27560
Telephone: 919.461.1100
Fax: 919.461.1415

Table 3 is a tabular summary of the gas well samples with the primary analytes required for submission to EPA. Prior to the field sample collection, Wells G-1, GMW-1, GMW-2 and GMW-3 were sampled with a GEM-200 analyzer to test for the presence of methane in the well. Methane was not detected in any of the wells or the vicinity of the wells above background.

URS appreciates the opportunity to assist your staff with this project. Please advise me at (919) 461-1242 if you have any questions.

Sincerely,

Robert F. Jongleux
Project Manager

Enclosure

cc: Chris Davis, URS/LOU
Project File/Task 53

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**TABLE 1**

**TO-15 DATA SUMMARY FOR AMBIENT AIR SAMPLES AT THE LEE'S LANE LANDFILL SAMPLING DATE: 25 APRIL 2013**

| | Ambient Air Samples | | | | | | |
|---|---|---|---|---|---|---|---|
| Sample ID | A1 | A2 | U1 | U2 | R1 | R2 | R3 |
| Canister ID | RA2300 | UJ1008 | HL0928 | RA2116 | RA2351 | HL0789 | 5429 |
| Dilution Factor | 2.1625 | 2.9678 | 2.7539 | 2.138 | 2.1895 | 2.7781 | 2.8027 |
| Location | ONSITE | ONSITE DUP. | LG&E | LEVEE | 4423 WILSHIRE | PUTNAM LANE | PUTNAM END |
| Veriflow ID | A181861 | A168513 | A218997 | FC023 | A134120 | A218796 | A181856 |
| Compound (ppbV) | | | | | | | |
| Benzene | 0.109 | 0.118 | 0.107 | 0.109 | 0.118 | 0.104 | 0.0818 |
| Methylene chloride | 0.168 | 0.134 | 0.128 | 0.121 | 0.13 | 0.0867 | 0.143 |
| Toluene | 0.227 | 0.497 | 0.551 | 1.00 | 0.737 | 0.492 | 0.646 |
| Vinyl chloride | ND | ND | ND | ND | ND | ND | ND |
| Xylene (Total) | ND | 0.0368 | ND | 0.1172 | 0.1003 | 0.0839 | ND |
| Methane (ppmV) | 3.99 | 4.37 | 4.19 | 3.88 | 3.86 | 3.96 | 4.09 |

ND = Non Detect < MDL and < Limit of Quantitation

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**TABLE 2**
**LOCAL METEOROLOGICAL DATA**
**AMBIENT AIR SAMPLES**
**SAMPLING DATE: 25 APRIL 2013**

| Time | Barometric Pressure (in Hg) | Temperature (°F) | Dewpoint (°F) | Wind Direction (from) | Wind Speed (mph) | Observation |
|---|---|---|---|---|---|---|
| 7:56 AM | 30.32 in | 37.9 °F | 35.1 °F | Calm | Calm | Clear |
| 8:56 AM | 30.35 in | 42.1 °F | 37.0 °F | SW | 4.6 mph | Clear |
| 9:56 AM | 30.34 in | 48.9 °F | 36.0 °F | SW | 6.9 mph | Clear |
| 10:56 AM | 30.34 in | 51.1 °F | 34.0 °F | SW | 9.2 mph | Clear |
| 11:56 AM | 30.34 in | 55.0 °F | 36.0 °F | SW | 13.8 mph | Partly Cloudy |
| 12:56 PM | 30.33 in | 57.0 °F | 35.1 °F | West | 11.5 mph | Partly Cloudy |
| 1:56 PM | 30.31 in | 59.0 °F | 36.0 °F | WSW | 9.2 mph | Partly Cloudy |
| 2:56 PM | 30.31 in | 62.1 °F | 37.9 °F | West | 18.4 mph | Mostly Cloudy |
| 3:56 PM | 30.29 in | 63.0 °F | 36.0 °F | WSW | 16.1 mph | Mostly Cloudy |
| 4:56 PM | 30.29 in | 63.0 °F | 37.0 °F | West | 16.1 mph | Mostly Cloudy |
| 5:56 PM | 30.29 in | 60.1 °F | 35.1 °F | WNW | 11.5 mph | Mostly Cloudy |

Source: National Weather Service, Louisville, Ky.

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**TABLE 3**
**TO-15 DATA SUMMARY FOR GAS MONITORING**
**SAMPLING DATE: 25 APRIL 2013**

| | Well Samples | | | | | | | | | BLANK |
|---|---|---|---|---|---|---|---|---|---|---|
| | G1 | G2 | G3 | G4 | G5-L | G5-R | GMW-1 | GMW-2 | GMW-3 | #1 |
| Canister ID | RA2029 | RA2035 | RA2028 | HL0842 | RA2115 | RA2257 | RA2165 | HL0800 | 5434 | RA2304 |
| Dilution Factor | 4.266 | 4.2076 | 4.1926 | 4.2228 | 4.2198 | 4.1374 | 4.1404 | 4.2798 | 4.2952 | 2.00 |
| Orifice | RA2029 | RA2034 | RA2028 | RA2031 | RA2027 | 5412 | HL029 | FC023 | RA2339 | NA |
| Sampling Date | 4/25/2013 | 4/25/2013 | 4/25/2013 | 4/25/2013 | 4/25/2013 | 4/25/2013 | 4/25/2013 | 4/25/2013 | 4/25/2013 | 4/25/2013 |
| Compound (ppbV) | | | | | | | | | | |
| Benzene | ND | ND | ND | 0.0528 | 0.0476 | 0.0311 | 0.0713 | 0.0401 | 0.0449 | ND |
| Methylene chloride | 0.131 | 0.0146 | ND | 0.0383 | ND | 0.0419 | 0.037 | 0.0321 | 0.0902 | ND |
| Toluene | 0.693 | 0.177 | 0.152 | 0.120 | 0.140 | 0.180 | 0.155 | 0.259 | 0.587 | 0.0282 |
| Vinyl chloride | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Xylene (Total) | 0.05 | ND | ND | 0.0136 | 0.00543 | 0.0147 | ND | 0.0116 | 0.00987 | ND |
| Methane (ppmV) | 1.27 | 1.47 | 1.65 | 2.24 | 1.71 | 2.38 | 1.54 | 1.86 | 2.31 | 0.548 |

ND = Non Detect < MDL and < Limit of Quantitation

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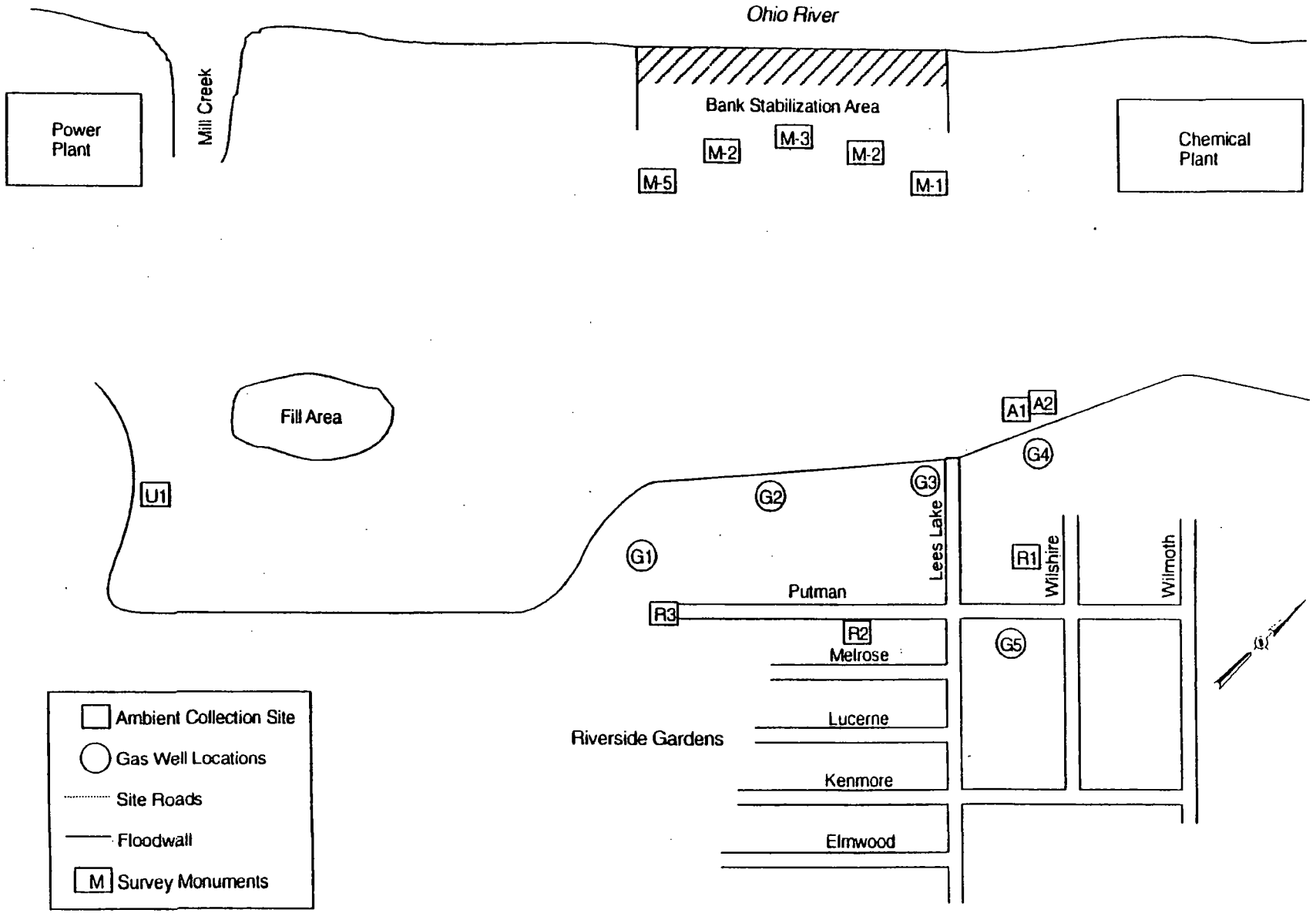


Figure 1. Lees Lane Landfill Sampling Locations